



## Weather and Climate



### Yukon-Charley Rivers Summer 2013 Weather Summary

Was summer 2013 normal?

Eagle was 3.1° F warmer than average for summer 2013.

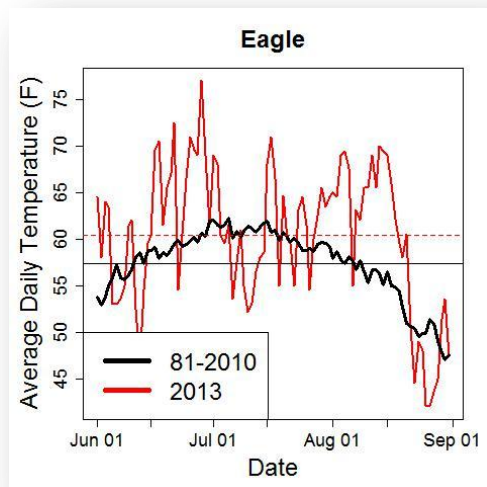
Warm temperatures dominated during the second half of June and mid-July through mid-August. The warm periods were accompanied by dry weather, but overall precipitation for the summer totaled 5.91 inches, which is just above the long term average.

Temp. Records

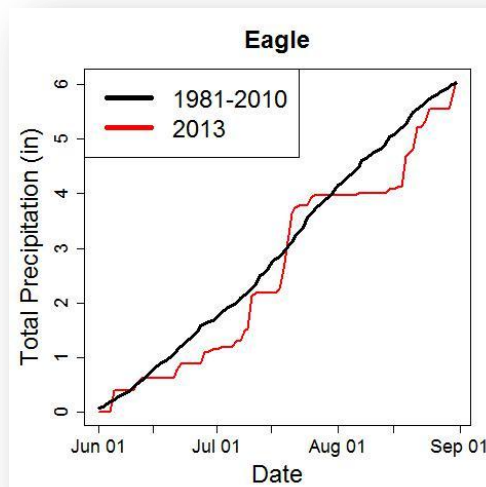
High Max  
6/16, 87°  
6/17, 89°  
6/28, 94°  
7/15, 86°  
8/3, 90°  
8/13, 92°  
8/14, 85°

In Eagle, summer 2013 had an average amount of rainfall and was warmer than normal. The average temperature for June was 4.2° F warmer than normal, with 1.15 inches of rainfall for the month, 75% of average. It was the second warmest June on record. Record high temperatures were broken on 6/16 (87° F), 6/17 (89° F), and 6/28 (94° F). The average temperature for July was 60.7° F compared to a normal monthly temperature of 60.4° F. One daily temperature record was broken in July: a daily high of 86° F on 7/15. 0.6 inches of rainfall on July 10 and an additional 1.0 inch of rainfall July 19-20 made up the majority of the monthly total of 2.83 inches, 117% of average for the month. The average monthly temperature for August was 58.5° F, 4.8 degrees warmer than average with three temperature records broken on 8/3, 8/13, and 8/14. Precipitation was 111% of average, with almost all of the rain coming in the second half of the month. Overall, the summer experienced an average amount of precipitation and was 3.1° F warmer than average.

Eagle – Average Air Temperatures



Eagle – Cumulative Precipitation



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## Eagle Weather Records:

Climate Normal Period 1981 – 2010

Climate Record Period 1949 – 2013

## Temperature

Summer 2013	Average Monthly Temp °F	1981-2010 Average* °F	Departure from Average °F	Monthly High °F / Date	Monthly Low °F / Date
June	62.2	58.0	<b>+4.2</b>	94 / June 28	33 / June 12
July	60.7	60.4	<b>+0.3</b>	86 / July 15, 16	38 / July 26
August	58.5	53.7	<b>+4.8</b>	92 / Aug 13	27 / Aug 27, 28

Summer Season Temperature Departure from Normal: +3.1° F

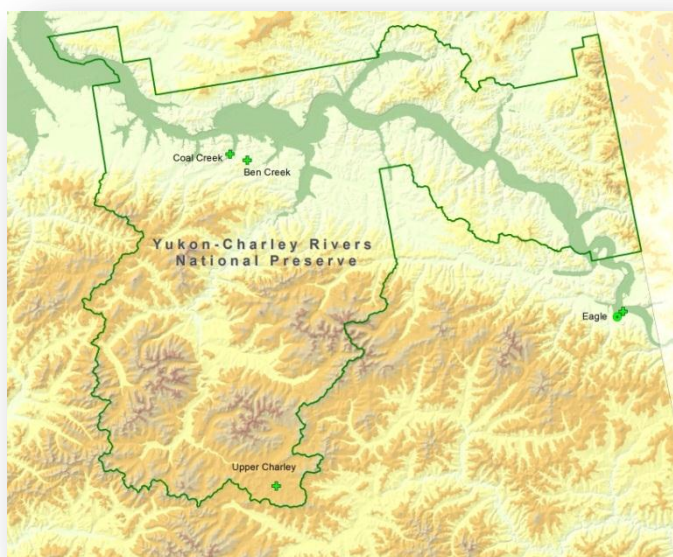
## Precipitation

Summer 2013	Total Monthly Precip. in.	1981-2010 Average* in.	Departure from Avg in.	Greatest 24 –hr. total in. / Date	# Days with >=0.01 in. water
June	1.15	1.54	<b>-0.39</b>	0.40 / June 5	8
July	2.83	2.43	<b>+0.40</b>	0.52 / July 19	15
August	2.07	1.86	<b>+0.21</b>	0.55 / Aug 18	12

Summer Season Departure from Normal: +0.22 inches

\*Note: NOAA 1981-2010 "normals" not available for Eagle COOP site. These tables are based on daily averages for 1981-2010 base period.

As part of the climate monitoring vital sign, additional NPS climate stations were installed in the preserve to complement the long-term record available from the National Weather Service station in Eagle. These additional sites provide critical data that help characterize the climate gradients and patterns affecting resources in Yukon-Charley Rivers National Preserve.



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Yukon-Charley Remote Automated Weather Station (RAWS) summaries – Summer 2013:

Site	Elev. Ft.	Summer 2013 Average Temp (°F)			*Precipitation (inches)			Peak Wind (mph)
		June	July	Aug	June	July	Aug	
Coal Creek	870	61.3	60.3	55.0	2.54	2.27	1.9	11
Upper Charley	3654	54.8	53.4	m	2.07	2.09	m	23
Ben Creek	1850	63.0	61.8	56.2	1.95	--	--	31

\* Preliminary data: precipitation gages are not shielded and may misrepresent actual rainfall. Ben Creek precipitation gage is not functioning properly since July (maintained by BLM Fire)

Interesting notes from RAWS stations:

- Typically, July is the warmest month on average. However, this year June was warmer at all Yukon-Charley Rivers RAWS stations.
- The high elevation Upper Charley site is typically warmer in the winter months due to inversions. However, in the summer months, this site averages temperatures 5 degrees cooler than Coal Creek.
- The difference between the maximum temperature of the summer at Coal Creek (87° F) and the minimum temperature (26° F) was 61 degrees. This 61 degree difference is only half of the 122 degree spread experienced in the fall months. Temperatures are relatively stable in the summer months compared to the shoulder seasons.



Coal Creek Climate Station

## Connecting Further

[Central Alaska Network climate monitoring vital sign](#)

Access near real-time data from [Western Regional Climate Center](#) and [MesoWest](#)

Check out the Jul-Aug-Sep weather outlook from the [NOAA Climate Prediction Center](#)

Statewide summary of weather highlights in the latest [Alaska Climate Dispatch](#) from the Alaska Center for Climate Assessment and Policy

[Map](#) of projected temperature and precipitation changes in Yukon-Charley Rivers National Preserve.

### For more information contact:

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Please Note: The summarized data are preliminary and have not undergone final quality control. Therefore, these data are subject to revision.